

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 February 2005 (03.02.2005)

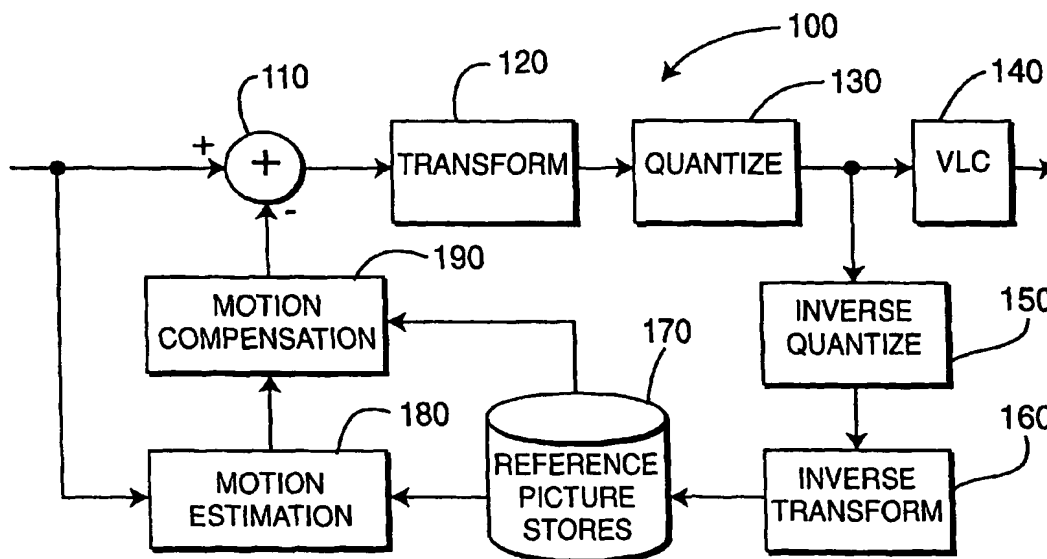
PCT

(10) International Publication Number
WO 2005/011255 A2

- (51) International Patent Classification⁷: **H04N**
- (21) International Application Number:
PCT/US2004/006071
- (22) International Filing Date: 1 March 2004 (01.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/482,670 26 June 2003 (26.06.2003) US
- (71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46, Quai A. Le Gallo, F-92648 Boulogne (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BOYCE, Jill, MacDonald** [US/US]; 3 Brandywine Court, Manalapan, NJ 07726 (US). **GIRELLINI, Daniel, Richard** [US/US]; 28 Juliet Street, New Brunswick, NJ 08901 (US).
- (74) Agents: **TRIPOLI, Joseph, S. et al.**; Two Independence Way, Suite #200, Princeton, NJ 08540 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: MULTIPASS VIDEO RATE CONTROL TO MATCH SLIDING WINDOW CHANNEL CONSTRAINTS



(57) Abstract: An encoder (100) and corresponding method (200) are disclosed for performing video rate control to meet network traffic model restrictions, including pre-encoding the sequence of pictures for each of a plurality of quantization parameter values, selecting for each picture of the sequence one of the plurality of quantization parameter values responsive to the quantization parameter values and bitrate operating points of the neighboring pictures in the sliding time window, and encoding each picture of the sequence using the quantization parameter value selected for that picture.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.